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Amendments to the Specification

Please replace the first full paragraph on page 2 of the application as originally filed with the following rewritten paragraph.

Besides absorbency and manufacturing ease, another desirable property of open-celled polymeric foams is the ability to make shaped or contoured absorbent cores having various shape configurations, fluid absorbency properties, and wear characteristics. Shaped or contoured absorbent cores made from foam materials have been disclosed in the diaper art. Shaped or contoured absorbent cores made from open-celled foam materials having particularly desirable fluid transport characteristics are disclosed in U.S. Patent 5,147,345 ('345 patent) issued to Young et al. on issued September 15, 1992 and hereby incorporated herein by reference. The Young et al. '345 core essentially comprises both a fluid acquisition/distribution component and a fluid storage/redistribution component. The fluid acquisition/distribution component is positioned within the absorbent article in such a way as to receive or contact aqueous body fluid which has been discharged into the absorbent article by the wearer of the article. The fluid storage/redistribution component in turn is positioned within the article to be in fluid communication with the fluid acquisition/distribution component.

Please replace the third full paragraph on page 3 of the application as originally filed with the following rewritten paragraph.

Additionally, it would be desirable to have an absorbent article that has an absorbent core having removable or replaceable components and a discontinuous backsheet, allowing saturated portions of the absorbent core to be removed through the backsheet discontinuity, thereby exposing unsaturated portions and allowing for prolonged use of reusable portions of an absorbent article.

Please replace the first paragraph of the Summary of the Invention section on page 3 of the specification as originally filed with the following rewritten paragraph. This section was previously amended in March 2000.

The present invention relates to absorbent articles suitable for absorbing and retaining adueous body fluids. The absorbent article comprises at least one removable absorbent core component, a first waist region, a second waist region, and a crotch region positioned between the first waist region and the second waist region. The absorbent article further comprises: (a) a

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backsheet joined to a fluid pervious topsheet, the backsheet comprising a web <u>made of a substantially liquid impervious material;</u> and (b) an absorbent core disposed between the topsheet and the backsheet, the absorbent core comprising a non-removable first absorbent core component disposed in at least the crotch region and at least one removable second absorbent core component removably disposed in the first waist region and in fluid communication with the first absorbent core component; wherein the backsheet further comprises first access means for providing access to the removable second absorbent core component through the backsheet so that the removable second absorbent core component may be removed from the absorbent article through the backsheet without having to remove the absorbent article from a wearer, the first access means comprising a first discontinuity being positioned in the first waist region, a first recloseable flap secured over the first discontinuity, and a first fastener for recloseably joining the first flap to the backsheet.

Please replace the third full paragraph on page 7 of the application as originally filed with the following rewritten paragraph. This paragraph was previously amended in June 1998, November 1998, March 2000, and July 2003.

As shown in FIGs. 1 and 2, when disposable diaper 60 is being worn, flap 42 may be secured over aperture 44 by suitable fasteners 43, such as VELCRO strips or adhesive strips (not shown). More preferably, flaps 42 are flap 42 is sealed with releasable adhesive, thereby providing for fluid impermeability when closed, but allowing for multiple openings and closings. Aperture 44 forms what may be described as a pocket or pouch, with absorbent core components, for example, back panel 30 being removable and replaceable through the pocket aperture 44. As shown in FIGs. 1 and 2, to remove back panel 30, flap 42 is lifted to form opening 41, and back panel 30 is extracted out of the absorbent article through aperture 44. To replace back panel 30, a fresh, dry absorbent component may be reinserted through backsheet 62 through aperture 44. FIG. 2 shows flap 42 42' in the closed position over opening 41 aperture 44' corresponding to front panel 20 (shown in FIG. 1). In general, front panel 20, (12/03) back panel 30, front panel 20, and corresponding apertures 44 and 44' and flaps 42 and 42' are substantially similar, but need not be. In an alternative embodiment, it may only be desired to include one aperture 44 and flap 42, for example, for access to back panel 30.

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Please replace the first full paragraph on page 8 of the application as originally filed with the following rewritten paragraph. This paragraph was previously amended in November 1998.

In a preferred embodiment of the absorbent article of the present invention, a discontinuity in backsheet 62 forms an aperture, e.g., aperture -44- 44", in the general proximity of front and rear panels 20 and rear panel 30 30' and/or aperture 44" in the proximity of a front panel (not shown), as shown in FIGs. 3 and 4. In this preferred embodiment a backsheet pocket 45 may be affixed adjacent aperture -44- 44". Backsheet pocket 45 serves and backsheet pocket 45' serve to contain and position front panel 20 (not shown) and back panel 30' and a front panel (not shown) as components made up of layered members, e.g., individual back panel members 34, 35, and 36 in FIG. 4. As one back panel member, e.g., back panel member 34, becomes saturated with bodily discharge it may be removed through opening -41- 41', exposing a fresh, dry back panel member, e.g., back panel member 35. Backsheet pocket 45 is preferably resilient and pliable, and is a substantially fluid impervious barrier over aperture -44- 44", functionally becoming an extension of backsheet 62.

Please replace the second full paragraph on page 8 of the application as originally filed with the following rewritten paragraph. This paragraph was previously amended in July 2003.

Back flap 42 Backsheet pocket 45 is reclosable and preferably resealable, and is preferably positioned so that as flap 42 it is secured in a closed position a back panel member, e.g., back panel member 35, is urged into fluid communication with center section 50.

Please replace the paragraph bridging from page 8 onto page 9 of the application as originally filed with the following rewritten paragraph. This paragraph was previously amended in June 1998.

FIG. 5 shows a preferred embodiment of the arrangement of back panels 30 panel 30', again showing representative pack panel members 34, 35, and 36 in a layered relationship adjacent aperture -44- 44'' and in fluid communication with center section 50. It is understood that the description in terms of back panels is equally applicable to front panels 20. Removal of back panels panel members through opening -41- 41' may be facilitated by the use of pull tabs, e.g., tabs 46, which may be of any type known in the art, such as a strip of plastic film adhered to each back panel member. Additionally, back panel members may be separated from one another

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by a fluid impervious blocking layer 47 so that adjacent back panel members are not in fluid communication with each other. Blocking layer 47 may be any fluid impervious polymer film, such as film suitable for use as a fluid impervious backsheet. As one back panel member becomes saturated by absorption of fluid from center section 50, it may be removed, thereby exposing a substantially dry, fresh back panel member 35 for additional absorption from center section 50. In this manner, the absorbent article may be refreshed or regenerated for a prolonged period of time without removal from the wearer.

Please replace the first full paragraph on page 9 of the application as originally filed with the following rewritten paragraph. This paragraph was previously amended in November 1998.

FIG. 6 shows a particularly preferred embodiment of the arrangement of back panel members. It is understood that the disclosure in terms of back panel members is equally applicable to front panel members 20. Back panel members 35 and 36 are shown as representative of back panel component 30 30' in a layered relationship with fluid impervious blocking layer 47 disposed between them. Blocking layer 47 is in a layered relationship with back panel members 35 and 36 and forms a fluid impervious layer between them. A portion of blocking layer 47 is preferably affixed, for example at attachment point 48, to the back panel member being removed. As a substantially saturated back panel member, e.g. back panel member 35, is pulled through backsheet opening 41 by pull tab 46 removed, blocking layer 47 is pulled through removed as well, thereby leaving the adjacent back panel member, e.g., back panel member 36, in position to be urged into fluid communication with center section 50 through aperture 44.

Please replace the second full paragraph on page 9 of the application as originally filed with the following rewritten paragraph. This paragraph was previously amended in June 1998.

An alternative embodiment of the front and back panels 20 and 30 of an absorbent article of the present invention is shown in cross-section in FIG. 7. While illustrated in terms of back panel 30, it is understood that the description is equally applicable to front panels. As shown in FIG. 7, rather than providing for a backsheet pocket 45 affixed to backsheet 62, a back panel envelope 49 is provided. Back panel envelope 49 has a single back panel 30 30" enveloped between a substantially fluid impervious layer 54 and a substantially fluid pervious layer 55, and

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may be affixed, for example, by suitable adhesives 39 known in the art, to the backsheet 62 adjacent to the perimeter 38 of aperture -44 44". Preferably back panel envelope 49 is removably affixed so that as back panel 30 30" becomes saturated due to absorption of fluid from center section 50 it may be removed and replaced with a fresh, dry back panel envelope 49.

Please replace the paragraph bridging from page 9 onto page 10 of the application as originally filed with the following rewritten paragraph. This paragraph was previously amended in June 1998.

An alternative embodiment of an absorbent article of the present invention has a fluid impervious backsheet without any discontinuities forming an opening through the backsheet. As shown in cross-section in FIG. 8, access to removable absorbent core members, e.g., members 34 and 35, is provided by an opening 41" between a topsheet 61 and backsheet 62 62'. As more fully described below with reference to FIG. 10, a fluid pervious topsheet is often used in absorbent articles as the wearer-contacting portion of the article. In an article of the present invention, the topsheet 61 and backsheet 62 62' may be separable at predetermined areas of the periphery 57, near waistband region 63, either in the front, back, or both. FIG. 8 shows the topsheet and backsheet separated in an open position. The opening 41" formed by the separation of the topsheet and backsheet allows removal or replacement of absorbent core components and is preferably resealable to provide for substantial fluid impermeability. The opening may be made resealable, for example, with a suitable adhesive 56 known in the art.

Please replace the first full paragraph on page 10 of the application as originally filed with the following rewritten paragraph.

Those skilled in the art will recognize additional embodiments of absorbent articles providing access to absorbent core components that do not depart from the scope of the present invention. For example, a back panel pocket 45 may be formed integrally with a backsheet 62 by plastically deforming the backsheet 62 in the area of the backsheet adjacent to the front and back panels 20 and 30. A backsheet discontinuity in the form of an opening may then be made, by die cut, for example, to allow access to front or back panels. A flap similar to flap 42 of FIG. 1 may be provided along with fastening means 43, to cover the opening in the backsheet.

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Please replace the paragraph bridging from page 10 onto page 11 of the application as originally filed with the following rewritten paragraph.

FIG. 9 shows an exploded perspective view depicting the elements of an embodiment of a shaped absorbent core 10 10' such as may be used in an absorbent article according to the present invention, for example, in a disposable diaper. As depicted in FIGs. 1,-3 and 11, the absorbent core 10 comprises a front panel 20 and a back panel 30, both made of absorbent material, preferably material suitable for fluid storage/redistribution. The front panel 20 has an outer front end 21, an inner front end 22, and a pair of sides 23. Similarly, the back panel 30 has an outer end 31, an inner back end 32, and a pair of sides 33. The front panel 20 has cut-out areas 40 at the intersection of the sides 23, and the inner front end 22. Similarly, the back panel 30 has cutout areas 40 at the intersection of the sides 33, and the inner back end 32. The cut-out areas 40, or notched portions, join the sides and the inner ends such that the resulting widths of the inner ends 22 and 32 are narrower than that of the outer ends 21 and 31, respectively. By "notched" is meant that instead of a side and end meeting at a generally right angle, some amount of material is removed from the corner to produce an additional edge portion joining the side and end. The additional edge portion of notch 40 may be generally straight, but in a preferred embodiment it is generally arcuate, as depicted in FIG. 11. It is also contemplated that the notch may have generally straight sides, with the limiting example resulting in a back or front panel being substantially trapezoidal-shaped.

Please replace the first full paragraph on page 11 of the application as originally filed with the following rewritten paragraph.

In a generally flat, unfolded state, the front panel 20 and back panel 30 are positioned such that the inner front end 22 of the front panel 20 is opposed to and spaced from the inner back end 32 of the back panel 30 as shown in FIGs. 9-13. The distance between the front and back panels may be varied as necessary. In general the distance will increase as the crotch length increases with the size of the absorbent article.

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Please replace the second full paragraph on page 11 of the application as originally filed with the following rewritten paragraph.

Center The center section 50 is preferably generally rectilinear. By "generally rectilinear" is meant that preferably the center section is of constant width along its length. In general, however, the center section 50 need only span and overlap the front and back panels 20 and 30, and may have a varying width along its length. When made by the method of the present invention, the center section 50 is generally rectilinear and extends from about the outer front end 21 of the front panel 20, to about the outer back end 31 of the back panel 30, as shown in FIG. 10. In use, however, the center section 50 need only be in fluid communication with the front and back panels 20 and 30, preferably by overlapping in a layered relationship, and may not extend to the outer front end 21 or the outer back end 31.

Please replace the third full paragraph on page 11 of the application as originally filed with the following rewritten paragraph.

Generally The generally rectilinear center section 50 may comprise multiple strips of absorbent material, each having individual fluid acquisition, acquisition/distribution or storage/redistribution characteristics, as well as individual shape, width, length and thickness characteristics. For example, in a preferred embodiment shown in FIG. 9, two relatively thin, flexible, resilient, polymeric foam strips 51 and 51' are preferably made from the same storage/redistribution material as the front and back panels 20 and 30. The strips 51 and 51' and front and back panels 20 and 30, having similar absorptive characteristics and being in fluid communication, act as primary storage/redistribution members.

Please replace the fourth full paragraph on page 11 of the application as originally filed with the following rewritten paragraph.

In a preferred embodiment generally rectilinear strip 52 comprises a relatively thin, flexible, resilient, polymeric foam material having greater fluid acquisition or acquisition/distribution characteristics than strips 51 and 51', thereby tending to quickly acquire and partition body exudates for more rapid absorption into storage/redistribution layers 51 and 51' and front and back panels 20 and 30.

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Please replace the first full paragraph on page 12 of the application as originally filed with the following rewritten paragraph. This paragraph was previously amended in November 1998, March 2000, and July 2003.

As shown in FIG. 10, the backsheet 62 of an embodiment of an absorbent article of the present invention is generally made of substantially liquid impervious material, but it is not continuous. In particular, a discontinuity in backsheet 62 forms an aperture 44 which makes backsheet 62 liquid pervious in the area of aperture 44. Adjacent backsheet 62 is disposed an absorbent core 10 10' which may itself comprise one or more absorbent components in distinct layers. Adjacent absorbent core 10 10' and preferably joined to the backsheet is a fluid pervious topsheet 61. Preferably, topsheet 61 and backsheet 62 are joined directly at the absorbent article's periphery by adhesive or other attachment means known in the art. Topsheet 61 may also be adhered to the absorbent core. It is also contemplated that topsheet 61 may be unitary with one or more absorbent core components, thereby essentially reducing the absorbent article to two basic structural components: an absorbent core having core components with an integral topsheet, and a backsheet.

Please replace the second full paragraph on page 12 of the application as originally filed with the following rewritten paragraph.

FIG. 10 shows an exploded perspective view of an absorbent core 10 10' as contemplated for use in a disposable diaper 60 according to the present invention. It should be understood, however, that the absorbent core 10 10' shown is also useful for other absorbent articles such as incontinent briefs, incontinent pads, training pants, and the like. The diaper 60 depicted in FIG. 10 is a simplified absorbent article that could represent a diaper prior to its being placed on a wearer. It should be understood, however, that the present invention is not limited to the particular type or configuration of diaper shown in FIG. 10.

Please replace the third full paragraph on page 12 of the application as originally filed with the following rewritten paragraph.

Disposable diaper 60 60" is shown in its uncontracted state (i.e., with generally all the elastic induced contraction removed) to more clearly show the construction of the diaper 60. The diaper 60 may comprise a substantially liquid pervious topsheet 61; a substantially liquid

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impervious backsheet 62 joined with the topsheet 61; and an absorbent core 10 10' positioned between topsheet 61 and backsheet 62. Additional structural features such as elastic members and fastening means for securing the diaper in place upon a wearer (such as tape tab fasteners) may also be included.

Please replace the paragraph bridging from page 12 onto page 13 of the application as originally filed with the following rewritten paragraph.

While topsheet 61, backsheet 62, and absorbent core 10 the topsheet, the backsheet, and the absorbent core can be assembled in a variety of well known configurations, a preferred diaper configuration is described generally in U.S. Patent 3,860,003 to Buell, issued January 14, 1975, which is hereby incorporated herein by reference. Alternatively preferred configurations for disposable diapers herein are also disclosed in U.S. Patent 4,808,178 to Aziz et al., issued February 28, 1989; U.S. Patent 4,695,278 to Lawson, issued September 22, 1987; and U.S. Patent 4,816,025 to Foreman, issued March 28, 1989, all of which are hereby incorporated herein by reference.

Please replace the first full paragraph on page 13 of the application as originally filed with the following rewritten paragraph.

FIG. 10 shows a preferred embodiment of the diaper 60 in which the topsheet 61 and the backsheet 62 are co-extensive and have length and width dimensions generally larger than those of the absorbent core 10. The topsheet 61 is joined with and superimposed on the backsheet 62 thereby forming the periphery of the diaper 60. The periphery defines the outer perimeter or the edges of the diaper 60.

Please replace the second full paragraph on page 13 of the application as originally filed with the following rewritten paragraph.

The topsheet 61 is compliant, soft feeling, and non-irritating to the wearer's skin. Further, the topsheet 61 is liquid pervious permitting liquids to readily penetrate through its thickness. A suitable topsheet 61 can be manufactured from a wide range of materials such as porous foams, reticulated foams, apertured plastic films, natural fibers (e.g., wood or cotton fibers), synthetic fibers (e.g., polyester or polypropylene fibers) or from a combination of natural and synthetic fibers. Preferably, the topsheet 61 is made of a hydrophobic material to isolate the wearer's skin

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from liquids in the absorbent core **10**. A particularly preferred topsheet **61** comprises staple length polypropylene fibers having a denier of about 1.5, such as Hercules type 151 polypropylene marketed by Hercules, Inc. of Wilmington, Delaware. As used herein, the term "staple length fibers" refers to those fibers having a length of at least about 15.9 mm (0.62 inches).

Please replace the third full paragraph on page 13 of the application as originally filed with the following rewritten paragraph.

There are a number of manufacturing techniques which can be used to manufacture the topsheet 61. For example, the topsheet 61 can be woven, nonwoven, spunbonded, carded, or the like. A preferred topsheet is carded, and thermally bonded by means well known to those skilled in the fabrics art. Preferably, the topsheet 61 has a weight from about 18 to about 25 grams per square meter, a minimum dry tensile strength of at least about 400 grams per centimeter in the machine direction, and a wet tensile strength of at least about 55 grams per centimeter in the cross-machine direction.

Please replace the paragraph bridging from page 13 onto page 14 of the application as originally filed with the following rewritten paragraph.

The backsheet 62 is made of a material substantially impervious to liquids and is preferably manufactured from a thin plastic film, although other flexible liquid impervious materials may also be used. Backsheet 62 prevents the exudates absorbed and contained in the absorbent core 10 from wetting articles which contact the diaper 60 such as bed sheets and undergarments. Preferably, the backsheet 62 is polyethylene film having a thickness from about 0.012 mm (0.5 mil) to about 0.051 centimeters (2.0 mils), although other flexible, liquid impervious materials can be used. As used herein, the term "flexible" refers to materials which are compliant and which will readily conform to the general shape and contours of the wearer's body. The polyethylene film of the backsheet may be used for flap 42 as well, with suitable adhesive-fastening making the backsheet of the present invention substantially impervious to fluids.

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Please replace the first full paragraph on page 14 of the application as originally filed with the following rewritten paragraph.

A suitable polyethylene film is manufactured by Monsanto Chemical Corporation and marketed in the trade as Film No. 8020. The backsheet 62 is preferably embossed and/or matte finished to provide a more clothlike appearance. Further, the backsheet 62 may be "breathable," permitting vapors to escape from the absorbent core 10 while still preventing exudates from passing through the backsheet 62. It is contemplated that a backsheet that is highly breathable but substantially impervious to liquid may be desirable for certain absorbent articles.

Please replace the second full paragraph on page 14 of the application as originally filed with the following rewritten paragraph.

The size of the backsheet 62 is dictated by the size of the absorbent core 10 and the exact diaper design selected. In a preferred embodiment, the backsheet 62 has a modified hourglassshape extending beyond the absorbent core 10 a minimum distance of at least about 1.3 centimeters to at least about 2.5 centimeters (about 0.5 to about 1.0 inch) around the entire diaper periphery. Additionally, according to the present invention more fully described below, the backsheet has may have at least one opening 41 aperture providing access through the backsheet to a portion of the absorbent core $\frac{10(12/03)}{12}$.

Please replace the third full paragraph on page 14 of the application as originally filed with the following rewritten paragraph.

The topsheet 61 and the backsheet 62 are joined together in any suitable manner. As used herein, the term "joined" encompasses configurations whereby the topsheet 61 is directly joined to the backsheet 62 by affixing the topsheet 61 directly to the backsheet 62, and configurations whereby the topsheet 61 is indirectly joined to the backsheet 62 by affixing the topsheet 61 to intermediate members which in turn are affixed to the backsheet 62. In a preferred embodiment, the topsheet 61 and the backsheet 62 are affixed directly to each other in the diaper periphery by attachment means (not shown) such as an adhesive or any other attachment means as known in the art. For example, a uniform continuous layer of adhesive, a patterned layer of adhesive, or an array of separate lines or spots of adhesive can be used to affix the topsheet 61 to the backsheet **62**.

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Please replace the paragraph bridging from page 14 onto page 15 of the application as originally filed with the following rewritten paragraph.

Tape tab fasteners 65 are typically applied to the waistband region 63 of the diaper 60 to provide a fastening means for holding the diaper on the wearer. The tape tab fasteners 65 depicted are representative only. The tape tab fasteners can be any of those well known in the art, such as the fastening tape disclosed in U.S. Patent 3,848,594 (Buell), issued November 19, 1974, which is hereby incorporated herein by reference. These tape tab fasteners or other diaper fastening means are typically applied near the corners of the diaper 60.

Please replace the first full paragraph on page 15 of the application as originally filed with the following rewritten paragraph.

Elastic members 69 are disposed adjacent the periphery of the diaper 60, preferably along each longitudinal edge 64, so that the elastic members tend to draw and hold the diaper 60 against the legs of the wearer. Additionally, elastic members 67 can be disposed adjacent either or both of the waistband regions 63 of the diaper 60 to provide a waistband as well as or rather than leg cuffs. For example, a suitable waistband is disclosed in U.S. Patent 4,515,595 (Kievit et al.), issued May 7, 1985, which is hereby incorporated herein by reference. In addition, a method and apparatus suitable for manufacturing a disposable diaper having elastically contractible elastic members is described in U.S. Patent 4,081,301 (Buell), issued March 28, 1978, which is hereby incorporated herein by reference.

Please replace the second full paragraph on page 15 of the application as originally filed with the following rewritten paragraph.

The elastic members are secured to the diaper 60 in an elastically contractible condition so that in a normally unrestrained configuration, the elastic members effectively contract or gather the diaper 60. The elastic members can be secured in an elastically contractible condition in at least two ways. For example, the elastic members can be stretched and secured while the diaper 60 is in an uncontracted condition. Alternatively, the diaper 60 can be contracted, for example, by pleating, and the elastic members secured and connected to the diaper 60 while the elastic members are in their unrelaxed or unstretched condition. The elastic members may extend along a portion of the length of the diaper 60. Alternatively, the elastic members can extend the entire Application No. 08/828,005 14 of 44
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length of the diaper 60, or any other length suitable to provide an elastically contractible line. The length of the elastic members is dictated by the diaper design.

Please replace the third full paragraph on page 15 of the application as originally filed with the following rewritten paragraph. This paragraph was previously amended in June 1998.

In use, the diaper 60 is applied to a wearer by positioning one waistband region under the wearer's back, and drawing the remainder of the diaper 60 between the wearer's legs so that the other waistband region is positioned across the front of the wearer. The tape-tab 65 or other fasteners are then secured preferably to outwardly facing areas of the diaper 60, as show shown in FIG. 2 and 4, for example. In use, the disposable diapers or other absorbent articles of the present invention tend to more quickly and efficiently distribute and store liquids and to remain dry due to the high absorbent capacity of the fluid absorbent members. Disposable diapers incorporating the fluid absorbent members of the present invention can also be thinner and more flexible.

Please replace the paragraph bridging from page 15 onto page 16 of the application as originally filed with the following rewritten paragraph.

When used as an absorbent core in a disposable diaper 60, a preferred embodiment of the core 10 10' is positioned such that acquisition/distribution strip 52 is in fluid contact with topsheet 61, and serves to quickly acquire and partition body exudates from the wearer's body to the generally more absorptive storage/redistribution strips 51 and front and back panels, 20 and 30. The front panel 20 generally corresponds to the portion of the disposable diaper worn in the front of the wearer, with the outer front end 21 being generally near the wearer's waist area. Similarly, the back panel 30 corresponds to the portion of the disposable diaper worn in the back of the wearer, with the outer back end 31 being generally near the wearer's waist area. Generally rectilinear center section 50 has a width 53 corresponding to a suitable width for the crotch area 66 of a disposable diaper. As well, the length of generally rectilinear center section 50 may be varied to provide a suitable fit for various wearer sizes.

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Please replace the second full paragraph on page 16 of the application as originally filed with the following rewritten paragraph.

The number and placement of strips 51 or 52 of generally rectilinear center section 50 may be varied to achieve desired characteristics such as thinness, softness, flexibility, or beneficial fluid acquisition, distribution, and storage rates. For example, FIG. 12 shows in cross-section an embodiment using one acquisition/distribution strip 52 and one storage/redistribution strip 51 in center section 50", both placed over front and back storage/redistribution panels 20 and 30, resulting in a thin, flexible absorbent core 10 10". By "over" is meant the side of the absorbent core of the invention corresponding to the wearer's body when used in an absorbent article such as a disposable diaper.

Please replace the paragraph bridging from page 16 onto page 17 of the application as originally filed with the following rewritten paragraph.

The number of layers of the front and back panels 20 or 30 may also be varied to achieve desired characteristics such as beneficial fluid acquisition and distribution rates, as well as capacity and storage rates. If more than one layer of absorbent material is used in the front or back panels, the panels are herein referred to as components, and the individual layers are herein referred to as members. For example, FIG. 13 shows in cross-section an additional embodiment corresponding to the general top view of FIG. 11. FIG. 13 depicts two members of front and back panels 20 20' and 30 30''', corresponding, for example, to back panel members 34 and 35, shown in FIG. 4. As shown in FIG. 13, both back panel members may be placed under the center section 50. As described above with reference to FIGs. 5 and 6, the members of a multi-layer front or back panel may be separated by fluid impervious material with beneficial results.

Please replace the first full paragraph on page 17 of the application as originally filed with the following rewritten paragraph.

In summary, the absorbent core 10 comprises a plurality of discrete components, each component capable of having distinct fluid acquisition, acquisition/distribution, or storage/redistribution characteristics. In the context of the present invention, it should be noted that the term "fluid" means "liquid." So long as the acquisition, acquisition/distribution, and storage/redistribution components are in fluid communication with adjacent components, they

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may be positioned relative to one another in a wide variety of configurations. Representative materials suitable for use with the present invention will now be described in greater detail.

Please replace the second full paragraph on page 17 of the application as originally filed with the following rewritten paragraph.

As described above, the absorbent core 10 comprises a plurality of discrete components, each component may comprise discrete members, each capable of having distinct fluid acquisition, acquisition/distribution, or storage/redistribution characteristics. The components or members may be made of any absorbent material or combination of materials having enough structural integrity to be handled as a discrete unit. Typical materials known in the art may be used, such as fibrous nonwoven materials, fibrous wet-laid web materials, and combinations of fibrous materials having absorbent gelling materials dispersed upon or within the fibrous structure. If necessary, such fibrous nonwoven materials may be formed into a pouch, of material, being substantially enveloped a fluid pervious web that provides the structural integrity for removal and replacement into the article of the present invention.

Please replace the paragraph bridging from page 24 onto page 25 of the application as originally filed with the following rewritten paragraph. This paragraph was previously amended in July 2003.

A preferred method of making the shaped absorbent core suitable for use with the present invention is now described with reference to FIGs. 14-19. FIG. 14 schematically shows a representative apparatus 70 suitable for accomplishing the method of forming the absorbent core components of the preferred embodiment of the present invention as depicted in FIG. 9 and 10. The method depicted in FIG. 14 and described in detail below can be easily modified to produce absorbent cores comprising different combinations and placement of absorbent members, such as those depicted in FIGs. 12 and 13. Representative modifications are shown schematically in FIG. 15 and, unless otherwise disclosed, can be understood with reference to the description of the method of FIG. 14 since like numerals identify like elements. The method is not limited to nonwoven web materials or absorbent polymeric foam materials, but is suitable for use with any generally absorbent material formed into webs, either nonwoven or woven, fibrous or polymeric, as known in the art that may be supplied on rollstock and have sufficient integrity to be processed by the method disclosed.

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Please replace the first full paragraph on page 25 of the application as originally filed with the

following rewritten paragraph. This paragraph was previously amended in June 1998 and July

2003.

A first relatively narrow rectilinear web 81 is unwound from a supply roll 71. Web 81 has a

width generally corresponding to width 53 of the generally rectilinear center section $50 \cdot 50'$, as

shown in FIGs. 1, 3, 9 and 10. Web 81 comprises a material suitable for use as an

acquisition/distribution layer 52 of the preferred embodiment as shown in FIGs. 9 and 10. Web

81 is guided through entry point 100 onto a conveyor 102 where it is positioned for further

processing as described below.

Please replace the second full paragraph on page 25 of the application as originally filed with the

following rewritten paragraph. This paragraph was previously amended in July 2003.

In a preferred embodiment, second and third relatively narrow rectilinear webs 82 and 83,

comprised of a material suitable for acquisition/distribution or storage/redistribution of aqueous

fluid, are unwound from supply rolls 72 and 73, respectively. Webs 82 and 83 correspond to

storage/redistribution layers 51 and 51' of FIGs. 9 and 10 and may have a width generally

corresponding to width 53 of the center section 50 50'. Webs 82 and 83 are guided through entry

point 100 onto a conveyor 102 where they are positioned in layers upon web 81 for further

processing as described below.

Please replace the third full paragraph on page 25 of the application as originally filed with the

following rewritten paragraph.

A relatively wide continuous rectilinear web 84 of absorbent material having a longitudinal

axis and lateral sides is unwound from a supply roll 74. In a preferred embodiment, web 84 is

suitable for use as a storage/redistribution member of the absorbent core 10, and is of a width

suitable for forming into the front panel 20 and back panel 30 shown in FIGs. 1, 3, 9 and 10. The

lateral sides of web 84 generally correspond to the sides 23 and 33 depicted in FIG. 11.

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Please replace the third full paragraph on page 26 of the application as originally filed with the following rewritten paragraph.

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The material being carried on conveyor 102 is fed into a second slip and cut assembly 150 for making transverse cuts severing all the layers of material. Cutting roller 152 has a diameter corresponding generally to the distance between the transverse centerlines 131 of discrete sections 85 as shown in FIG. 18. Roller 151 serves as a platen for a cutting blade 153 attached to cutting roller 152. Cutting blade 153 completely severs the layers at or near transverse centerlines 131 of discrete sections 85. Upon exiting the second slip and cut assembly 150, the absorbent material has been formed into the individual absorbent cores 10 to the present invention. Various known methods may be used to separate the individual absorbent cores 10, such as by varying the relative speeds of conveyors 102 and 160. The individual absorbent cores 10 are carried by conveyor 160 for further processing into absorbent articles, if necessary, and appear on conveyor 160 in plan view as shown in FIG. 19.

Please replace the paragraph bridging from page 26 onto page 27 of the application as originally filed with the following rewritten paragraph.

As shown in FIG. 19, it is not necessary for the length of front panel 20 measured from outer front end 21 to inner front end 22 to equal the length of the back panel 30 measured from its outer back end 31 to its inner back end 32. The position of the layered material on conveyor 102 in relation to the second slip and cut assembly 150 determines the relative lengths of front panel 20 and back panel 30. In a preferred embodiment of the present invention the back panel 30 is longer than the front panel 20 as depicted in FIG. 19. Such a configuration lends itself to a better fit when the absorbent core 10 is used in a disposable diaper.

Please replace the first full paragraph on page 27 of the application as originally filed with the following rewritten paragraph.

As shown in FIGs. 14 and 15, the length of interval 130 may be varied to produce the desired length of center section 50. It is desirable to be able to vary the length of center section 50 of an absorbent core 10 for use in disposable diapers to accommodate the difference in sizes of children or adults using such diapers.